RESOURCES AND DEVELOPMENT

Exercise

1. **Multiple choice questions.**

Ans:

- **i.** d –non- renewable
- **ii.** a – Replenishable
- **iii.** c - Overirrigation
- **iv.** d- Uttaranchal
- **v.** b- Gujarat

2. **Answer the following questions in about 30 words.**

i. Name three states having black soil and the crop which is mainly grown in it.

Ans: Maharashtra, Gujarat, Madhya Pradesh, Cotton is mainly grown in black soil.

ii. What type of soil is found in the river deltas of the eastern coast? Give three main features of this types of soil.

Ans: Alluvial soil is found in the eastern coastal plains.

Features of the Alluvial Soil:

a) Alluvial soil is the most widespread and important soil.

b) The entire northern plans are made of this soil. These have been deposited by three important Himalayan river systems-The Indus, the Ganga and the Brahmaputra.

c) Alluvial soil also extends to Rajasthan and Gujarat through a narrow corridor.

iii. What steps can be taken to control soil-erosion in the hilly areas?

Ans:
a. By terrace farming.

b. By ploughing along the contour lines.

c. By strip cropping.

d. By growing shelter belts**.**

iv. What are the biotic and abiotic resources? Give some examples.

Ans: **Biotic resources:** Biotic resources are obtained from the biosphere, e.g. Forests and their products, agriculture crops, birds, animals, fish, grass.

Abiotic resources: Resources obtained from non-living things. For example, rocks and metals.

3. **Answer the following questions in about 120 words.**

(i) Explain land use pattern in India and why has the land under forest not increased much from 1960-61?

Ans: The total geographical area in India is 328.73 million hectares but land use data is available only for 305.94 million hectares (2012-13) which is about 93% of the total area. The uses of land in India are:

a. **Net Sown Area (NSA):** Net Sown Area is the area actually available for cultivation. It is the most important land use pattern in India. NSA is 139.93 million hectares or 45.74% (in 2012-13) of the total land area in India (2008-09)

b. **<u>Forest:</u>** it is the second most important land use in India. Various organizations are making efforts to increase area under forests for maintaining ecological balance and sustainable development.

c. **<u>Land not available for cultivation:</u>**

i. Barren and wastelands are economically unproductive land, e.g., sandy wastes, marshes, rocky and snow covered surfaces, steep slopes. Man is creating wastelands by deforestation, improper farming techniques, dumping industrial chemical wastes.

ii. Land put to non-agricultural uses, e.g., built-up area ____ buildings, commercial complexes, roads, hospitals, stadiums, industries, historical buildings.

d. **<u>Other uncultivated land</u>:** (excluding fallow lands)

i. Permanent pastures and grazing lands.

- Pastures account for only 3.35% of total land use in India in 2012-13.
- It is not sufficient to support our vast cattle population. To meet requirements of fodder, animals are fed with grain chaff, few fodder crops, farm green wastes.
- Pasturelands too, in past, were brought under farming.

ii. Land under miscellaneous tree crops/orchards or just tree plantation farms.

iii. Culturable wastelands: These lands are left uncultivated for more than five agriculture years.

e. **<u>Fallow lands:</u>** It is agricultural land left uncultivated for few months to few years for regaining soil fertility. Percentage of fallow land is declining because government and farmers are making efforts to cultivate them by:

i. Expanding irrigation facilities.
ii. Adopting crop rotation.
iii. Using manures and fertilizers.

> **Fallow land is productive agriculture land. It should be cultivated for**
> **1.** Meeting requirements of food and agricultural raw materials.
> **2.** Keeping the farmer busy and employed.
> **3.** Bringing economic benefits to farmers and local area.

Follow land is divided into two parts:

i. **<u>Current fallow land</u>**: The farming land left uncultivated for few months to one agricultural year.

ii. **<u>Other than current fallow land:</u>** The farming land left uncultivated for one to five agricultural years.

Figure

Land under forest has not increased since 1960-61 due to the following reasons:

(i) Population of India is increasing very rapidly. Land is being used for construction of houses and other buildings for the increasing population for our country. India is a developing country. Factories, mills and other business establishments are being constructed frequently all over India. Roads are constructed, railway lines are extending and bridges are fabricated.

(ii) Local people are not using forest land properly. They are cutting trees without proper planning. People are not planting new trees and intensive farming is not practiced.

(iii) Waste land reclamation plans are not implemented.

(iv) The demand for residential land is increasing in villages and towns.

(v) The land has been increasingly utilized to expand industry, commerce and recreation facility.

(vi) Conditions of desertification are at rise.

(ii) How have the technical and economic development led to more consumption of resources?

Ans:(i) It has set-up a number of manufacturing units in the field of consumer durables, capital goods, luxury items, like cosmetics that tend to consume more and more resources as raw materials.

(ii) Human beings are tempted to western line of consumption.

(iii) A new middle class has emerged on account of exparte economic development, therefore, trend of consumption is increasing year by year.

(iv) Information technology has brought boom in human choices, interests, hobbies, life-style and status-symbols.

Project /Activities

1. Make a project showing consumption and conservation of resources in your locality.

Ans: **Consumption of resources in my locality:** (i) air, (ii) water, (iii) parks, (iv) electricity, (v) fossil fuels.

Conservation of Resources:

(i) **Air:** **(a)** Vehicular pollution has been reduced to minimum level because of the use of CNG kits.

(b) Industries have been shifted to distant places a-mid-dense vegetal cover.

(c) Municipality has deployed staff colony-wise to remove garbage and domestic waste on daily basis.

(d) Highways are under supervision of sanitary inspectors and dustbins have been stalled by and large.

(ii) **Water:** (**a**) Roof-top water harvesting system are installed.

(b) People are conscious enough saving water because of__ consumption based extra-billing schedule ___ adopted by the Water Board.

(c) Pipe lines are checked every now and then in our area and people are requested to report instantly whenever they find pipes are cracked, valves are disrupted or ruptured.

(d) Media reports suggest various measures for water saving in locality.

(iii)Parks: (**a**) These are under supervision of municipality staff.

(b) Instructions not to throw wrappers, satchets etc. of eatables have been affixed at the gate and inside the fence.

(c) Penal provisions are strictly implemented for miscreants in the park area.

(d) Flower plants and trees are trimmed, weeding carried out and watered time to time by the municipal staff.

(iv)Electricity: (**a**) Electronic meters have now replaced old meters and new devices for meter-reading have been developed .

(b) In order to maintain proper supply, to grip the theft events and redress consumers grievances: special arrangements have been made.

(c) Billing slabs proportionate to consumption have been made so as consumer's may not mis-use electricity because it would now cause excess burden on their pockets.

(v) **Fossil Fuels:** (**a**) Use of CNG and electricity has reduced the level of fossil fuel consumption.

(b) Strict laws have been passed in order to prevent burning of fossil fuels in the open air.

(c) Solar energy is being used for cooking ironing and in operation of small machines.

2. Have a discussion in the class-how to conserve various resources used in your school.

Ans: Self Attempt

3. Imagine if oil supplies get exhausted, how will this affect our life style?

Ans: Crude oil is a non-renewable resource. This resource takes millions of years in its formation. If oil supplies get exhausted, we will be in great trouble. It will definitely and adversely affect our daily life. We will not get our school bus because of lack of petrol or diesel. We will have to come to our school either on foot or bicycle etc. There will be no gas cylinder in our chemistry lab. Our canteen will not get fuel for cooking and preparing eatables and drinks. Economy of the entire nation will be shattered.

4. Solve the puzzle by following your search horizontally and vertically to find the hidden answers.

Ans:

(i) Resource
(ii) Minerals
(iii) Black Soil
(iv) Laterite
(v) Afforestration
(vi) Alluvial